are not limited to, the following characteristics: immunologically reactive with a monoclonal antibody produced by the hybridoma cell line identified as ATCC No. HB9205 (i.e., ALZ-50, further described below); has an isoelectric point of about 6 in reduced or non-reduced form; binds to an affi-Blue column; is at least 50% soluble in a solution of 0.01 M sodium phosphate, 0.14 M sodium chloride and 1 mM phenyl methyl sulfonyl fluoride at pH 6.8, and precipitates in 50% saturated ammonium sulfate at 4°C.

Since its first description, the Alzheimer's antigen has been additionally referred to as A68, tau, hyperphosphorylated tau (Lee et al., *Science* 251: 675-678, 1991), abnormally phosphorylated tau (Grundke-Iqbal et al., *Proc. Natl. Acad. Sci.* 83: 4913-4917, 1986), soluble PHF (Greenberg and Davies, *Proc Natl. Acad. Sci* 87: 5827-5831, 1990), PHF tau (Greenberg et al., *J. Biol. Chem.* 267: 564-569, 1992), and Alzheimer's Disease Associated Protein (ADAP) (Ghanbari et al., *JAMA* 263: 2907-2910, 1990) All terms are deemed to be equivalent when referring to the Alzheimer's antigen herein. It contains tau and phosphorylated tau. Thus, according to the invention, A68 refers to a form of the microtubule-associated protein tau which, in Alzheimer's disease, is the primary protein constituent of paired helical filaments Relative to normal tau (also a microtubule protein), it is hyperphosphorylated and exhibits an altered conformation.

A68 is obtained in only a "partially purified" form as described in Example 1 of PCT International Application WO 96/20218. By comparison, as described herein, in the process of obtaining a purified preparation of A68 antigen, it was discovered that, not only did the preparation comprise expected elements that needed to be removed (e.g., proteins, etc.), but also, that the preparation surprisingly contained immunoglobulin G (IgG). Removal of such IgG substantially and surprisingly increases the effectiveness of the antigen preparation, and its effectiveness for use in an assay.

Accordingly, the present invention provides a protein preparation consisting essentially of an antigen that is immunologically reactive with a monoclonal antibody produced by the hybridoma cell line identified as ATCC No. HB9205 (i.e., Alz-50), wherein the preparation is substantially free of immunoglobulin G. As used herein, "substantially free of immunoglobulin G" means a preparation having an amount of